UNITED STATES PATENT AND TRADEMARK OFFICE

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LAHIVE & COCKFIELD, LLP
ONE POST OFFICE SQUARE
BOSTON, MA 02109-2127

EXAMINER
BRIER, JEFFERY A

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _22 June 2007_.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _48-55_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _48-55_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

06/22/2007 has been entered.

Response to Amendment

2.   The amendment filed on 06/22/2007 has been entered.

Response to Arguments

3.   Applicant's remarks filed 06/22/2007 have been fully considered but they do not

present any arguments concerning the allowability of new claims 48-55. As set forth

below new claims 48-55 are currently not allowable.

Specification

4.   The specification is objected to as failing to provide proper antecedent basis for

the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction

of the following is required:

the extending step at lines 16 and 17 of claim 51 is not present in the

specification, however, they are present in originally filed claim 9;

the replacing step at lines 2 and 3 of claim 52 is not present in the specification,

however, they are present in originally filed claim 10; and

the limitation at lines 3 and 4 of claim 53 "said lines representing transitions

between said states" is not present in the specification, however, they are present in

originally filed claim 15.

Claim Objections

5.   Claim 51 is objected to because of the following informalities: at line 13 of this

New claim a strikethrough of a exists "a" which in view of 37 CFR 1.121 means delete a

previously presented claim limitation.   Appropriate correction is required.

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

7.   Claims 48-55 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claim 48:

The last three lines of this claim are not technically correct since they do not

clearly claim where the differences will be placed.   In the last line the claim does not

clearly state whether the display is displaying the other block diagram model before inserting and does not claim which portion is displayed or after inserting the differences and does not claim which portion is displayed.

At line 10 "said block diagram model" lacks antecedent basis in the claim since previously models was claimed. At line 16 "said other block diagram model" lacks antecedent basis in the claim since previously models was claimed.

Claims 49 and 50:

Both of these claims claim data element being replaced while in parent claim 48 differences in said selected one of said two block diagram models is inserted into said other block diagram model. Thus, these claims do not clearly claim where the replaced data elements will be placed and if they correspond to the differences of the parent claim.

Claim 51:

This claim is incomplete for lacking essential steps because lines 16-17 do not state what happens when the distance is at least as large as said pre-defined parameter. Claim 52 would make claim 9 complete.

In claim 51 only the line is displayed, thus, this claim is incomplete for lacking essential steps because it only displays a line. The line being displayed with the merged diagram is needed because the merged diagram is essential to understanding the displayed extended line. In addition the specification does not describe displaying only the extended line.

Claim 53:

At line 22 "of said other state diagram" is claimed and does not clearly claim where the differences will be placed. At lines 13-23 "some of said" is claimed, however, "some" includes "one or more", thus, when "some" is read as "one difference" this renders the copying step unclear as to how many differences are being copied, a functional difference or a graphical difference. In the last line the claim does not clearly state whether the display is displaying the other state diagram before inserting and does not claim which portion is displayed or after inserting the differences and does not claim which portion is displayed.

At line 17 "said other state diagram model" lacks antecedent basis in the claim

Claim 54:

At lines 23-26 "copying less than all of said graphical differences from said other block diagram model; inserting the copied functional differences and graphical differences into said other block diagram model" is claimed, however, it is unclear how the graphical difference is copied from and to the same "other block diagram model. At lines 17-27 "some of said" is claimed, however, "some" includes "one or more", thus, when "some" is read as "one difference" this renders the copying step unclear as to how many differences are being copied, a functional difference or a graphical difference. In the last line the claim does not clearly state whether the display is displaying the other block diagram model before inserting and does not claim which portion is displayed or after inserting the differences and does not claim which portion is displayed.

At line 5 "said block diagram model" lacks antecedent basis in the claim since previously models was claimed.

Claim 55:

At lines 12-21 "some of said" is claimed, however, "some" includes "one or more", thus, when "some" is read as "one difference" this renders the copying step unclear as to how many differences are being copied, a functional difference or a graphical difference. In the last line the claim does not clearly state whether the display is displaying the other block diagram model before inserting and does not claim which portion is displayed or after inserting the differences and does not claim which portion is displayed.

At line 10 "said block diagram model" lacks antecedent basis in the claim since previously models was claimed.

Claims 48-52, 54, and 55:

These claims are similar to claims 5-7, 9, 10, 17, 19, and 22 filed in the 11/13/2006 amendment with the difference being "electronic diagrams" was changed to "block diagram models". Applicants specification discusses "electronic diagrams" and "state diagrams" while an underlying model was discussed at page 4 lines 25-30, page 5 lines 5-9, 14-18, and 26-32, and page 7 lines 4-7, however, this underlying model is not the same as the claimed "block diagram models", thus, the metes and bounds of these claims are unclear. Biomedino LLC v. Waters Technologies Corp., 83 USPQ2d 1118 (Fed. Cir. 2007).

Claims 48-50, 54, and 55:

If the "block diagram models" is an underlying model defining the electronic

diagram then the displaying step does not clearly that which is displayed since the

merged electronic diagram is displayed to the user.

Claim Rejections - 35 USC § 102

8.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a
foreign country or in public use or on sale in this country, more than one year
prior to the date of application for patent in the United States.

9.   Claims 48-50 and 53-55 are rejected under 35 U.S.C. 102(b) as being

anticipated by Schatz et al., U.S. Patent No. 5,845,270.

Claims 48-50 and 53-55 are similar to claims 5-7, 17, 19, and 22 filed in the

11/13/2006 amendment with the difference being "electronic diagrams" was changed to

"block diagram models". Shatz teaches block diagram models in that a model

represents the block diagram.

The rejection set forth in the Final Rejection mailed on 12/22/2006 is reproduced

below with changes to claim numbering. The term electronic diagram used in the

discussion of Shatz in the Final Rejection is retained in the following discussion since

applicants specification uses the term electronic diagram rather than "block diagram

model".

Schatz describes comparing at least two electronic diagrams, column 1 lines 41-45, and merging at least two electronic diagrams, column 10 line 65 to column 11 line 21, and Schatz also describes comparing at least two state diagrams, column 1 lines 36-39, and merging at least two state diagrams, column 10 line 65 to column 11 line 21.

Shatz at column 2 lines 3-7 and 31-34, column 6 lines 43-45 and 55-58, column 6 line 67 to column 7 line 2, column 7 lines 8-17 and 49-51, column 8 lines 8-18 and 33-48, column 9 lines 6-9, 35-37, and 39-47, column 10 lines 21-27 and 44-47, and column 11 lines 56-58 teaches to the skilled artisan the broadly claimed determining differences between electronic diagrams and enabling a user to select one or more of said differences (attributes, systems, resources, etc) which are then programmatically merging the selected differences from one diagram into another diagram at a location where the difference should be placed in the merged diagram.

Schatz does teach merging some of the graphical differences because the specification at page 12 lines 9 to 11 broadly defines graphical difference as cosmetic/graphical and does not specify any specific cosmetic or graphical differences, thus, the examiner proposes that changes in size, location, and whitespace are inherently included in applicant's cosmetic/graphical difference. Thus, when Schatz at column 11 lines 11-21 states:

It should be understood that a merged network diagram may be displayed as an extension of either of the original network diagrams or a new network diagram, depending upon the user defined taxonomy used in the creation of the merged network diagram. The primary difference between an original network diagram and a reconstituted display of the same generated from a database underlying the merged network diagram is the possible addition of a single system u representing one or more systems in a universal class not included in either of the original network diagrams.

and at lines 29-35:

If the trees of systems are mutually exclusive, then the trees of systems are combined
with a system u representing a universal tree of aggregate systems not found in either
tree to form a new tree (unless the combination of both trees of systems includes all
systems in the universal tree of systems, making this step unnecessary).

Schatz is teaching to one of ordinary skill in the art that a combined diagram may have

less graphical elements than each of the individual diagrams have when view

separately. A number of graphical or cosmetic elements may be absent such as

spacing or whitespace between lines, blocks, etc of the diagram, size of each of the

lines, blocks, etc of the diagram, and/or location of the lines, blocks, etc of the diagram.

These examples are not exclusive of other cosmetic/graphical differences that may be

present in the merged diagram taught by Schatz.

A detailed analysis of the claims follows.

Claim 48:

Schatz teaches in an electronic device (*see figure 6, computer system 600 is an*

electronic device since it uses an magnetic disk, column 5 line 38, and since it uses a

cathode ray tube for a display, column 5 line 42) interfaced with a display surface

(*column 5 lines 40-43 discusses various displays 621 connected to computer 600*), a

method, comprising the steps of:

    providing two block diagram models (*Schatz discusses circuit diagrams used in*

electrical engineering as being the types of diagrams Schatz compares and merges at

column 1 lines 41-45), said block diagram models having blocks (*electrical components*

are often grouped as blocks in electrical circuit diagrams, such as used in depicting an integrated circuit, microprocessor, memory, etc.) representing components of a system;

determining corresponding features of said block diagram models that are present in both of said block diagram models (*in the merging of diagrams Schatz determines redundant diagram features, see column 11 lines 49-52 and 64-67*);

determining differences between said block diagram models (*in the merging of diagrams Schatz determines differences between diagram features when at least the redundant diagram features are determined, see column 11 lines 49-52 and 64-67*);

categorizing said differences between said two block diagram models as functional differences (*The flow between nodes, the flow between systems, the flow between nodes in a subsystem, the flow between subsystem nodes of one system to subsystem nodes of another system are examples of functions of the diagrams and during the merging process differences between the two diagrams are determined in order to form the merged diagram.*) and graphical differences (*Graphical differences are related to the display of the merged diagrams and are a function of the functional differences.*), said functional differences controlling the performance of a system represented by said block diagram model, said graphical differences affecting the appearance of said block diagram model displayed to a user;

copying all of said functional differences from said selected one of said two block diagram models (*This is taught by merging the resource into the diagram at the appropriate location.*);

copying less than all of said graphical differences from said selected one of said

two block diagram models (*Schatz teaches merging some of the graphical differences*

because the specification at page 12 lines 9 to 11 broadly defines graphical difference

as cosmetic/graphical and does not specify any specific cosmetic or graphical

differences, thus, the examiner proposes that changes in size, location, and whitespace

are inherently included in applicant's cosmetic/graphical difference. Schatz at column

11 lines 11-21 and at lines 29-35 teaches to one of ordinary skill in the art that a

combined diagram may have less graphical elements than each of the individual

diagrams have when view separately. A number of graphical or cosmetic elements may

be absent such as spacing or whitespace between lines, blocks, etc of the diagram, size

of each of the lines, blocks, etc of the diagram, and/or location of the lines, blocks, etc of

the diagram. These examples are not exclusive of other cosmetic/graphical differences

that may be present in the merged diagram taught by Schatz.);

inserting the copied functional differences and graphical differences into said

other block diagram model (*The merging of the two diagrams inserts the copied*

functional and graphical differences from one of the two diagrams into an appropriate

location in the other of the two diagrams.); and

displaying at least a portion of the other block diagram model on the display

surface (*Column 5 lines 40-43 discusses various displays 621 connected to computer*

600 and column 11 lines 12-15 describes displaying the merged diagram.).

Claim 49:

Schatz teaches the method of claim 48, comprising the further step of:

cascading hierarchically the replacement of data elements in said other block

diagram model wherein said data elements being replaced are arranged in a tree

structure (*Schatz discusses at column 11 lines 28-35 and 42-47 replacing the tree*

structure of one diagram with the tree structure of another diagram during the merge

process), said tree structure having parent data elements with child data elements

attached thereto, said child data elements in said other block diagram model being

replaced when said parent data element is replaced (*when a tree structure is replaced*

the child data associated with parent data is replaced).

Claim 50:

Schatz teaches the method of claim 5, comprising the further step of:

cascading hierarchically the replacement of data elements in said other block

diagram model wherein said data elements being replaced are arranged in a tree

structure (*Schatz discusses at column 11 lines 28-35 and 42-47 replacing the tree*

structure of one diagram with the tree structure of another diagram during the merge

process), said tree structure having parent data elements with child data elements

attached thereto, said child data elements of corresponding parent data elements in two

electronic diagrams being replaced without replacing the corresponding parent data

element (*This is described in applicants specification at page 11 lines 11-14. Thus,*

when the user in Schatz selects resources to be merged such as child resources, the

user is selecting to display child resources, then, only the displayed child resources are

merged. Column 10 lines 44-47.).

Claims 53, 54, and 55:

These claims are similar to claim 48 and they are rejected for the reasons given

for claim 48. These claims additionally claim "enabling a user to select some (which still

claims one or more) of said differences". Schatz teaches this at column 10 lines 44-47

the Shatz teaches allowing the user to choose which resources to display which means

the user selects selected resources. Claim 48 also claims block diagram model

electronic diagram while claim 53 claims a state diagram. Both types of diagrams are

discussed at column 1 lines 37-45 of Schatz, thus, state diagrams are compared and

merged by Schatz. Claim 54 is claiming essentially the electronic device of claim 48 is

connected to a network and having the electronic diagrams received by the electronic

device over the network. Schatz teaches at column 6 lines 7-28 storing the data to be

analyzed at a location different than the computer 600 and computer 600 is connected

to a network LAN/WAN via network interface 603. Thus, the electronic diagrams

compared and merged by Schatz are retrieved from a database via the network, stored

locally, and then compared and merged. The claim limitation including "at least one

semantic connection, said semantic connection associating components within the

same system in said block diagram model" is met by the attribute that semantically

associates all of the diagram components to a diagram and is met by the attribute that

semantically associates all of the sub system components to a particular subsystem.

This type of connection in the diagram is taught by Schatz by the attributes which

identifies diagram components to a diagram and by Schatz when a component's sub

system is analyzed since all of the components of the sub system do not have a direct

connection to each other but they are semantically associated with the same sub

system. See column 1 lines 53-55 and 59-62, column 2 lines 31-34, column 3 lines 51-

57, column 4 lines 11-16, and column 5 lines 6-16 for various semantic connections that

associates within the same system an electronic diagram. Also column 11 lines 5-8

teaches to merge diverse diagrams each diverse diagram is formed from known

resources or systems. Claim 55 also claims *In an electronic device interfaced with a*

display surface, a medium holding computer-executable instructions for a method.

Schatz discusses at column 5 lines 29-30 and column 6 lines 14-17 storing instructions

for the processes executed by the processor 602 in main memory 604. Main memory

604 is a medium holding the computer executable instructions for causing a processor

to perform the comparing and merging.

10.   A proper prior art analysis of the claim 51 and 52 cannot be made because the

metes and bounds of the claims are not definite and because the specification does not

support these claims in view of the specification not describing "block diagram models".

Thus, a prior art rejection or an indication of allowability cannot be made with the

currently pending claims. In re Steele, 305 F.2d 859,134 USPQ 292 (CCPA 1962) (it is

improper to rely on speculative assumptions regarding the meaning of a claim and then

base a rejection under 35 U.S.C. 103 on these assumptions).

11.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-

7656. The examiner can normally be reached on M-F from 7:30 to 4:00. If attempts to

reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael

Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization

where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/Jeffery A. Brier/
Primary Examiner, Division 2628